

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An exhaust gas control system for an internal combustion engine, comprising:
 - an internal combustion engine, and
 - a filter for capturing particulate matter in exhaust gas discharged from the internal combustion engine, the filter being provided in an exhaust passage for the internal combustion engine,
 - wherein an entire range of an engine operating state decided by a rotational speed and torque of the internal combustion engine includes a first operating state range where a temperature of the exhaust gas discharged from the internal combustion engine is low, and the particulate matter captured by the filter is not oxidized and an amount of the particulate matter deposited in the filter increases if a recovery process is not performed, and a second operating state range where the temperature of the exhaust gas discharged from the internal combustion engine is high, and the particulate matter captured by the filter is oxidized and the amount of the particulate matter deposited in the filter decreases even if the recovery process is not performed, and
 - the exhaust gas control system further comprises a filter forced recovery portion that performs the recovery process that removes the particulate matter captured by the filter by forcibly oxidizing the particulate matter so as to recover a capturing ability of the filter; and
 - a deposited amount detection portion that detects an amount of the particulate matter that is captured by the filter and deposited in the filter, wherein:
 - the filter forced recovery portion performs the recovery process when the

amount of the particulate matter deposited in the filter which is detected by the deposited amount detection portion becomes equal to or larger than a predetermined amount in a case where the operating state of the internal combustion engine belongs to the first operating state range;

the filter forced recovery portion performs the recovery process based on a continuous belonging time period during which the operating state of the internal combustion engine continues to belong to the second operating state range in a case where the operating state of the internal combustion engine belongs to the second operating state range; and

the filter forced recovery portion performs the recovery process when the continuous belonging time period during which the operating state of the internal combustion engine continues to belong to the second operating state range becomes equal to or longer than a predetermined time period in a case where the operating state of the internal combustion engine belongs to the second operating state range.

2. (Canceled)

3. (Previously Presented) The exhaust gas control system according to claim 1, wherein the predetermined time period is decided based on the amount of the particulate matter deposited in the filter which is detected by the deposited amount detection portion when the operating state of the internal combustion engine starts to belong to the second operating state range.

4. (Canceled)

5. (Previously Presented) A method for recovering a filter of an exhaust gas control system for an internal combustion engine, which includes a filter for capturing particulate matter in exhaust gas discharged from an internal combustion engine, the filter being provided in an exhaust passage for the internal combustion engine; a filter forced recovery portion that performs a recovery process that removes the particulate matter captured

by the filter by forcibly oxidizing the particulate matter so as to recover a capturing ability of the filter; and a deposited amount detection portion that detects an amount of the particulate matter captured by the filter and deposited in the filter, and in which an entire range of an engine operating state decided by a rotational speed and torque of the internal combustion engine includes a first operating state range where a temperature of the exhaust gas discharged from the internal combustion engine is low, and the particulate matter captured by the filter is not oxidized and an amount of the particulate matter deposited in the filter increases if a recovery process is not performed, and a second operating state range where the temperature of the exhaust gas discharged from the internal combustion engine is high, and the particulate matter captured by the filter is oxidized and the amount of the particulate matter deposited in the filter decreases even if the recovery process is not performed, the method comprising the steps of:

detecting the amount of the particulate matter deposited in the filter using the deposited amount detection portion in a case where the operating state of the internal combustion engine belongs to the first operating state range;

performing the recovery process using the filter forced recovery portion when the detected amount of the particulate matter deposited in the filter becomes equal to or larger than a predetermined amount in the case where the operating state of the internal combustion engine belongs to the first operating state range; and

performing the recovery process using the filter forced recovery portion based on a continuous belonging time period during which the operating state of the internal combustion engine continues to belong to the second operating state range in a case where the operating state of the internal combustion engine belongs to the second operating state range; wherein

the recovery process is performed when the continuous belonging time period

during which the operating state of the internal combustion engine continues to belong to the second operating state range becomes equal to or longer than a predetermined time period in a case where the operating state of the internal combustion engine belongs to the second operating state range.

6-7. (Canceled)

8. (Previously Presented) An exhaust gas control system for an internal combustion engine, comprising:

an internal combustion engine, and

a filter for capturing particulate matter in exhaust gas discharged from the internal combustion engine, the filter being provided in an exhaust passage for the internal combustion engine,

wherein an entire range of an engine operating state decided by a rotational speed and torque of the internal combustion engine includes a first operating state range where a temperature of the exhaust gas discharged from the internal combustion engine is low, and the particulate matter captured by the filter is not oxidized and an amount of the particulate matter deposited in the filter increases if a recovery process is not performed, and a second operating state range where the temperature of the exhaust gas discharged from the internal combustion engine is high, and the particulate matter captured by the filter is oxidized and the amount of the particulate matter deposited in the filter decreases even if the recovery process is not performed, and

the exhaust gas control system further comprises a filter forced recovery portion that performs the recovery process that removes the particulate matter captured by the filter by forcibly oxidizing the particulate matter so as to recover a capturing ability of the filter; and

a deposited amount detection portion that detects an amount of the particulate matter that is captured by the filter and deposited in the filter, wherein:

the filter forced recovery portion performs the recovery process when the amount of the particulate matter deposited in the filter which is detected by the deposited amount detection portion becomes equal to or larger than a predetermined amount in a case where the operating state of the internal combustion engine belongs to the first operating state range;

the filter forced recovery portion performs the recovery process based on a continuous belonging time period during which the operating state of the internal combustion engine continues to belong to the second operating state range in a case where the operating state of the internal combustion engine belongs to the second operating state range; and

the filter forced recovery portion performs the recovery process when an accumulated time period during which the operating state of the internal combustion engine belongs to the second operating state range after a previous recovery process is finished becomes equal to or longer than a predetermined time period.

9. (Currently Amended) A method for recovering a filter of an exhaust gas control system for an internal combustion engine, which includes a filter for capturing particulate matter in exhaust gas discharged from an internal combustion engine, the filter being provided in an exhaust passage for the internal combustion engine; a filter forced recovery portion that performs a recovery process that removes the particulate matter captured by the filter by forcibly oxidizing the particulate matter so as to recover a capturing ability of the filter; and a deposited amount detection portion that detects an amount of the particulate matter captured by the filter and deposited in the filter, and in which an entire range of an engine operating state decided by a rotational speed and torque of the internal combustion engine includes a first operating state range where a temperature of the exhaust gas

discharged from the internal combustion engine is low, and the particulate matter captured by the filter is not oxidized and an amount of the particulate matter deposited in the filter increases if a recovery process is not performed, and a second operating state range where the temperature of the exhaust gas discharged from the internal combustion engine is high, and the particulate matter captured by the filter is oxidized and the amount of the particulate matter deposited in the filter decreases even if the recovery process is not performed, the method comprising the steps of:

detecting the amount of the particulate matter deposited in the filter using the deposited amount detection portion in a case where the operating state of the internal combustion engine belongs to the first operating state range;

performing the recovery process using the filter forced recovery portion when the detected amount of the particulate matter deposited in the filter becomes equal to or larger than a predetermined amount in the case where the operating state of the internal combustion engine belongs to the first operating state range;~~and~~

performing the recovery process using the filter forced recovery portion based on a continuous belonging time period during which the operating state of the internal combustion engine continues to belong to the second operating state range in a case where the operating state of the internal combustion engine belongs to the second operating state range;~~range;~~ and

performing wherein the recovery process is ~~performed~~ when an accumulated time period during which the operating state of the internal combustion engine belongs to the second operating state range after a previous recovery process is finished becomes equal to or longer than a predetermined time period. ~~in a case where the operating state of the internal combustion engine belongs to the second operating state range.~~